

REMARKS

By this amendment, claims 1, 3-8, 13, and 18-19 are amended. No new matter has been added. Claims 1-24 remain for consideration in the application.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-2, 9, 13-14, 16, 18-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by Johnson (U.S. Patent No. 4,222,274). Applicant traverses this rejection, and submits that the claims define over Johnson.

Claim 1 as amended recites a ring with sensors “to gather image data of external features of an object within the ring.” In contrast, Johnson is directed toward internal imaging, and no mention is made of any external imaging or for any need for external imaging. As such, Applicant submits that claim 1 is allowable. Claim 2 depends from and further defines patentably distinct claim 1, and is also believed allowable.

Claim 9 recites “sensing subject external image information.” As has been mentioned above with respect to claim 1, Johnson does not teach external imaging. Applicant respectfully submits that claim 9 contains subject matter not present in Johnson, and is therefore allowable.

Claim 13 as amended recites the creation of “a three dimensional image of the external features of the object.” Johnson does not teach imaging the external features of an object, and as such, does not teach each and every element of claim 13. Applicant respectfully submits that claim 13 is allowable. Claims 14 and 16 depend from and further define patentably distinct claim 13, and are also believed allowable.

Claim 18 as amended recites “means for sensing external parameters of an object.” As has been discussed above, Johnson does not teach such external sensing. Applicant respectfully submits that claim 18 is allowable.

Claim 19 as amended recites “a sensor ring having a plurality of sensors, each of the sensors operatively connected to provide sensing data of external features of an object to the computer.” In contrast, Johnson only teaches internal imaging. No mention is made of any external imaging or for any need for external imaging. Johnson does not contain each and every element of claim 19, and Applicant respectfully submits that claim 19 is allowable. Claims 20-23 depend from and further define patentably distinct claim 19, and are also believed allowable.

Claims 3, 7, 10-12, and 24-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Seo et al. (U.S. Patent No. 6,685,644). Applicant traverses this rejection, and submits that the claims define over Seo et al.

Claim 3 as amended recites “a first imaging device for imaging an external surface of an object to be imaged” and “a second imaging device for imaging internal features of the object to be imaged.” Claim 10 recites “obtaining a three dimensional internal image of an object” and “obtaining a three dimensional external image of the object.” Claim 24 recites “obtaining an internal image of the object” and “obtaining a three dimensional external image of the object.” In contrast, the imaging devices of Seo et al. that are discussed in the office action are each imaging devices that image internal features of the object. There is not external imaging of the object shown or taught in Seo et al. As such, Seo et al. does not contain each and every element of any of claims 3, 10, or 26, and Applicant respectfully submits that claims 3, 10, and 26 are allowable. Claims 7, 11-12, and 25-26 depend from and further define one of patentably distinct claims 3, 10, or 24, and are also believed allowable.

Claim Rejections Under 35 U.S.C. § 103

Claims 4-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Seo et al. (U.S. Patent No. 6,685,644) in view of Johnson (U.S. Patent No. 4,222,274) or Dick et al. (U.S. Patent No. 4,233,988). Applicant traverses this rejection.

Claim 3 as amended and its allowability over Seo et al. have been described above. Neither Johnson or Dick et al., nor any combination thereof, add, teach, or suggest imaging external features to Seo et al., and as such, the elements of claim 3 are still not met. Claims 4-5 depend from and further define patentably distinct claim 3, and are also believed allowable.

Claims 3 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Seo et al. (U.S. Patent No. 6,685,644) in view of Martin et al. (U.S. Patent No. 6,275,722). Applicant traverses this rejection.

Claim 3 as amended and its allowability over Seo et al. have been described above. The arguments apply equally as well to this rejection. Martin et al. does not contain any teaching or suggestion of the missing elements from Seo et al., and as such adds nothing to the analysis. Applicant respectfully submits that claim 3 as amended is allowable. Claim 6 depends from and further defines patentably distinct claim 3, and is also believed allowable.

Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Seo et al. (U.S. Patent No. 6,685,644) as applied to claim 3 above, and in further view of Desai (U.S. Patent No. 5,433,198). Applicant traverses this rejection.

Claim 3 as amended and its allowability over Seo et al. have been described above. The arguments apply equally as well to this rejection. Desai does not contain any teaching or suggestion of the missing elements from Seo et al., and as such adds nothing to the analysis. Applicant respectfully submits that claim 3 as amended is allowable. Claim 6 depends from and further defines patentably distinct claim 3, and is also believed allowable.

Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson (U.S. Patent No. 4,222,274) as applied to claim 13 above, and in further view of Martin et al. (U.S. Patent No. 6,275,722). Applicant traverses this rejection.

The allowability of claim 13 has been discussed above. Martin et al. does not contain any teaching or suggestion of the missing elements from Johnson, and as such adds nothing to the analysis. Claim 15 depends from and further defines patentably distinct claim 13, and is also believed allowable.

Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson (U.S. Patent No. 4,222,274) in view of Martin et al. (U.S. Patent No. 6,275,722) as applied to claim 15 above, and in further view of Seo et al. (U.S. Patent No. 6,685,644). Applicant traverses this rejection.

The allowability of claim 15 has been discussed above. Seo et al. does not contain any teaching or suggestion of the missing elements from Johnson in view of Martin et al., and as such adds nothing to the analysis. Claim 17 depends from and further defines patentably distinct claim 15, and is also believed allowable.

RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 10/626,157

Title: MEDICAL IMAGING DEVICE AND METHOD

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CONCLUSION

Applicant submits that all the claims are in condition for allowance, and requests that the rejections be withdrawn and that a notice of allowance be issued in this application. If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2203.

Respectfully submitted,

Date: 15 June 2005



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